Exhibit D

Experiment 1 (killing a laboratory *E. coli* strain)

Donor 1: (control) S17-1 carrying self-transmissible plasmid without *colE3* (plasmid is **TetR**, donor A below)
Donor 2: S17-1 carrying a non self-transmissible plasmid with *colE3* (plasmid is **TetR**, donors B and C below)
Donor 3: S17-1 carrying a self-transmissible plasmid with *colE3* (plasmid is **T tR**, donors D and E below)
Note: S17-1 is an E. coli strain carrying RK2 integrated in the genome

Recipient: CON4-54A (*E. coli* VH1000, **RifR**)

Donor and recipient cells were mixed and conjugated on a filter for 1 hour at 37°C, and exconjugants were selected by two antibiotics, Tet and Rif. Under this antibiotic selection, the donor or the recipient itself was not able to grow on this plate, which was shown at the bottom of each plate.

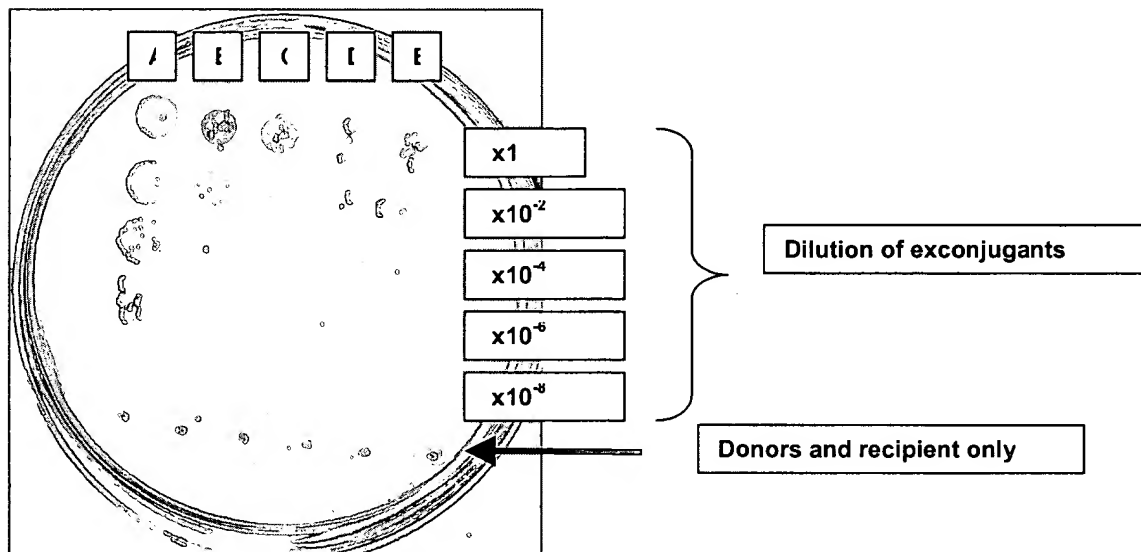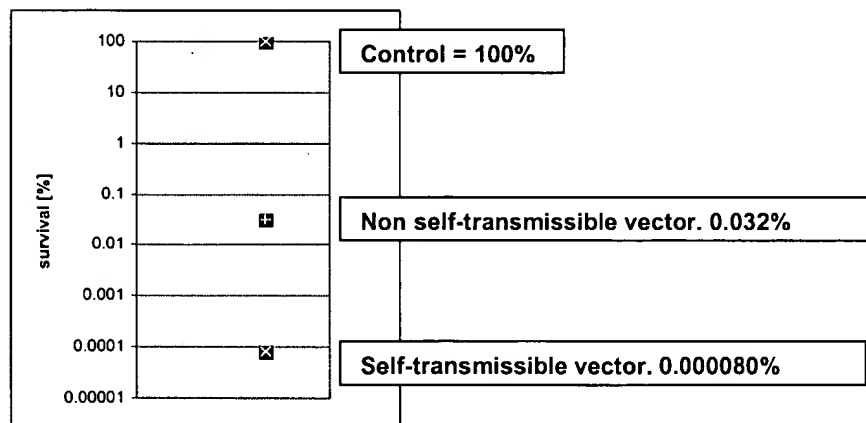Conjugation plate (LB with **Tet/Rif**) selecting exconjugants

Table. Number of exconjugants counted from the plate above

dilution	Control (A)	non self-transmissible vector		self-transmissible vector	
		clone #1 (B)	clone #2 (C)	clone #1 (D)	clone #2 (E)
1	TNC	TNC	TNC	2	5
10^{-2}	TNC	19	12	1	1
10^{-4}	TNC	0	0	0	0
10^{-6}	5	0	0	0	0

NOTE: TNC - Too Numerous to Count

Comparison of survival values after conjugation (based on the data shown above)

Control = 100%

Non self-transmissible vector. 0.032%

Self-transmissible vector. 0.000080%

NOTE: Average value was used for each plasmid